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PHO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0551-0031

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	•	·	Application Number	10/764,345
TRANS	MITT	AL	Filing Date	Jan 23, 2004
FO	FORM			r Liu
(to be used for all corresp	oondence afte	er initial filing)	Group Art Unit	
			Examiner Name	
Total Number of Pages	in This Submi	ission	Attorney Docket Num	ber MS1-1811US
		ENCL	OSURES (che	ck all that apply)
Fee Transmittal Form Fee Attached Amendment / Reply After Final Affidavits/declaration Extension of Time Request Express Abandonment Request Information Disclosure State Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing under 37 CFR 1.52 or	uest ement Parts	Drawing Licensin Petition Petition Provisio Change Address Termina Reques	nent Papers Application) (s) Sheet ag-related Papers to Convert to a nal Application of Attorney, Revocation of Correspondence It Disclaimer t for Refund Imber of CD(s)	After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please identify below): PTO Form 1449; 20 cited references; return postcard
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Firm or Individual name Signature Date	//	Reg/No. 40,55	9	K AGENI
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I hereby certify that this correspondence an envelope addressed to: Commission	ce is being de oner for Paten	posited with the lats, P.O. Box 145	United States Postal Serv 0, Alexandria, VA 22313-	ce with sufficient postage as first class mail in 1450 on this date: 9/29/04
Typed or printed name Signature	arly Taylor	XTail	And In	ate 9/29/04

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Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

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Application Number	10/764,345	···
Filing Date	Jan 23, 2004	
First Named Inventor	Liu	
Examiner Name		
Art Unit		
Attorney Docket No.	MS1-1811US	

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	2001 385	Utility filing fee		1255	2,010	2255	1,005	Extension for reply within fifth month	<u> </u>
	2002 170	Design filing fee		1401	330	2401	165	Notice of Appeal	
1003 530	2003 265	Plant filing fee	 	1402	330	2402	165	Filing a brief in support of an appeal	
1004 770	2004 385	Reissue filing fee		1403	290	2403	145	Request for oral hearing	
1005 160	2005 80	Provisional filing fee		1451	1,510	1451	1,510	Petition to institute a public use proceeding	
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SUBMITTED BY					(Complete	(if applicable))
Name (Print/Type)	Kazey C. Christje		Registration No. (Attorney/Agent)	40,559	Telephone	(509) 324-9256
Signature	Ton			-	Date	9-27-04
						

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.	10/764,345
Filing Date	Jan 23, 2004
Confirmation No	5777
Inventorship	Liu
Applicant	Microsoft Corporation
Group Art Unit	······
Examiner	•••••
Attorney's Docket No	MS1-1811US
Title: Watermarking via Quantization of Rational S	tatistics of Regions

INFORMATION DISCLOSURE STATEMENT

References -- See Attached Form PTO-1449

REMARKS

The citations listed, copies attached, are submitted in compliance with the duty of disclosure defined in 37 CFR §1.56. The Examiner is requested to make these citations of official record in this application.

ate: 4-27-04

Respectfully Submitted,

Ву: __

Rasey C. Christie Reg. No. 40,559

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Complete if Known

Application Number 10/764,345

Filing Date Jan 23, 2004

First Named Inventor Liu

Group Art Unit
Examiner Name

Attorney Docket Number

MS1-1811US

				U.S. PATENT DOCL	JMENTS	
Examiner Initials*	iner Cite		U.S. Patent Document Name of Patentee or of Cited Document (If known)		Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		5465353		Hull et al.	11/07/1995	
		5613004		Cooperman et al.	03/18/1997	
		5664016		Preneel et al.	09/02/1997	
		5689639		Schwarz	11/18/1997	
		5809498		Lopresti et al.	09/15/1998	
		6101602		Fridrich	08/08/2000	
		6363463		Mattison	03/26/2002	
		6370272		Shimizu	04/09/2002	
		6700989		Itoh et al.	03/02/2004	
		5875264		Carlstrom	02/23/1999	
		5351310		Califano et al.	09/27/1994	
		6321232		Syeda-Mahmood	11/20/2001	
		5953451		Syeda-Mahmood	09/14/1999	·- ·- ·
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			EP 0581317		Interactive Home Systems	02/02/1994		
			WO 01/11890		Macrovision Corporation	02/15/2001	· ·	1
			WO 01/28230		Koniklijke Philips Electronics	04/19/2001		1-
			WO 99/17537		Hewlett-Packard Company	04/08/1999		1
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INFORMATION DISCLOSURE				Application Number	10/764,345			
				Filing Date	Jan 23, 2004			
STA	TEMENT	BY	APPLICANT	First Named Inventor	Liu			
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Sheet	2	of	3	Attorney Docket Number	MS1-1811US			

Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. Chang et al., "RIME: A Replicated Image Detector for the World-Wide Web" Proceedings of the SPIE Vol. 3527 2-4 November 1998 pages 58-67. Kesal et al., "Iteratively Decodable Codes for Watermarking Applications" Proceedings of the Second Symposium on Turbo Codes and Their Applications France September 2000 4 pages. Malvar, "A Modulated Complex Lapped Transform and its Applications to Audio Processing" IEEE ICASSP'99 Phoenix AZ. March 1999 pages 1-4. Mihcak et al., "A Perceptual Audio Hashing Algorithm: A Tool For Robust Audio	T2
Proceedings of the SPIE Vol. 3527 2-4 November 1998 pages 58-67. Kesal et al., "Iteratively Decodable Codes for Watermarking Applications" Proceedings of the Second Symposium on Turbo Codes and Their Applications France September 2000 4 pages. Malvar, "A Modulated Complex Lapped Transform and its Applications to Audio Processing" IEEE ICASSP'99 Phoenix AZ. March 1999 pages 1-4. Mihcak et al., "A Perceptual Audio Hashing Algorithm: A Tool For Robust Audio	
Proceedings of the Second Symposium on Turbo Codes and Their Applications France September 2000 4 pages. Malvar, "A Modulated Complex Lapped Transform and its Applications to Audio Processing" IEEE ICASSP'99 Phoenix AZ. March 1999 pages 1-4. Mihcak et al., "A Perceptual Audio Hashing Algorithm: A Tool For Robust Audio	
 Audio Processing" IEEE ICASSP'99 Phoenix AZ. March 1999 pages 1-4. Mihcak et al., "A Perceptual Audio Hashing Algorithm: A Tool For Robust Audio	
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Identification and Information Hiding" Proceedings of the Information Hiding Workshop 2001 15 pages.	
Mihcak et al., "Cryptanalysis of Discrete-Sequence Spread Spectrum Watermarks" Proceedings of the Information Hiding Workshop Holland 2002 21 pages.	
Mihcak et al.,"New Iterative Geometric Methods for Robust Perceptual Image Hashing" Proceedings of the Security and Privacy Digital Rights Management Workshop 2001 9 pages.	
Mihcak et al.,"Watermarking via Optimization Algorithms for Quantizing Randomized Statistics of Image Regions" Proceedings of the Annual Allerton Conference on Communication Control and Computing Urbana IL 2002 10 pages.	
Moulin et al., "A Framework for Evaluating the Data-Hiding Capacity of Image Sources" IEEE Transactions on Image Processing Vol. 11 No. 9 September 2002 pages 1-14.	
Moulin et al., "The Parallel-Gaussian Watermarking Game" IEEE Transactions Information Theory Feb. 2004 pages 1-36.	
Venkatesan et al.,"Image Watermarking with Better Resilience" Proceedings of IEEE-ICIP Vancouver BC Canada 2000 4 pages.	
Venkatesan et al., "Robust Image Hashing" Proceedings of the IEEE-ICIP Vancouver BC Canada 2000 3 pages.	
	Mihcak et al., "Watermarking via Optimization Algorithms for Quantizing Randomized Statistics of Image Regions" Proceedings of the Annual Allerton Conference on Communication Control and Computing Urbana IL 2002 10 pages. Moulin et al., "A Framework for Evaluating the Data-Hiding Capacity of Image Sources" IEEE Transactions on Image Processing Vol. 11 No. 9 September 2002 pages 1-14. Moulin et al., "The Parallel-Gaussian Watermarking Game" IEEE Transactions Information Theory Feb. 2004 pages 1-36. Venkatesan et al., "Image Watermarking with Better Resilience" Proceedings of IEEE-ICIP Vancouver BC Canada 2000 4 pages.

Examiner Signature /Dante Ravetti/ (06/01/2010)	Date Considered	/Dante Ravetti/ (06/01/2) 10)
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STA	TEME	NT BY	APPLICANT	First Named Inventor	Liu		
•			,	Group Art Unit		***	
	(use as	many sheet	s as necessary)	Examiner Name			
heet	3	of	3	Attorney Docket Number	MS1-1811US		

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.1						
		Echizen et al., "General Quality Maintenance Module for Motion Picture Watermarking" IEEE Trans. on Consumer Electronics Vol. 45 No. 4. Nov 1999 pp1150-1158.					
		Fridrich et al., "Robust Hash Functions for Digital Watermarking" Proc. Int. Conf. on Information Technology: Coding and Computing March 2000 pp 178-183.					
		Lee et al., "Adaptive Video Watermarking Using Motion Information" Proc SPIE Vol. 3971: Security and Watermarking of Multimedia Contents II Jan 2000 pp. 209-216.					
		Wu et al., "Video Access Control Via Multi-level Data Hiding' Proc. IEEE Int. Conf. on Multimedia and Expo Vol. I Jul/Aug 2000 pp 381-384.					

Examiner Signature	/Dante Ravetti/ (06/01/2010)	Date Considered	/Dante Ravetti/ (06/01/2) 2010'
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